

Fostering A Healthy Society



Massachusetts Department of Public Health

1985 Annual Report

MASSACHUSETTS DEPARTMENT OF PUBLIC HEALTH

Bailus Walker, Jr., Ph.D., M.P.H.
Commissioner of Public Health
Chairman, Public Health Council

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From the Office of the Commissioner

With the issuing of this newly formatted Department of Public Health Annual Report for 1985, we wish to call particular attention to the breadth and depth of services provided by our many divisions, offices, and hospitals, services that reflect the Department's basic legislative mandate—"To maintain, protect and improve the health and well-being of the people."

Although first formulated in 1869, this mandate remains unchanged, underscoring the Department's approach to solving the problems that have arisen in this, the last decade and a half of the 20th Century. Reiterating the belief that sound health is a right of all people and that the delivery of health care operates within the confines of the social and economic factors that affect their lives, the Department established a list of public health priorities and objectives to improve the health and safety of Massachusetts residents, as well as to control the spiraling cost of health care in the state. During the fiscal year that ended June 30, 1985, the Department made substantial progress in carrying out its objectives.

This progress is exemplified by the many accomplishments in five general categories:

- **Fostering a Healthy Society**

During the fiscal year, the Department improved on a number of activities to meet the needs of Massachusetts residents. Services to enhance the health of the family, to help prepare adolescents for a healthy adulthood, to prevent addictive diseases, to prevent dental disease, and to support public health activities in local communities, were provided comprehensively and to ensure access to persons in need.

- **Protecting the Individual**

Integral to the prevention of disease is the two-pronged approach to changing people's lifestyles and reducing the risk of physical, chemical, and biological agents in the environment. During the last fiscal year, the Department's Center for Health Promotion and Environmental Disease Prevention and the Bureau of Environmental Health Services were successful in increasing comprehensive high blood pressure detection and follow-up, enhancing public information efforts on the serious health effects of lead poisoning, and

beginning to meet its responsibilities under the provisions of the Massachusetts Right-to-Know Law.

- **Enhancing Patient Services and Health Care Cost Containment**

In fiscal year 1985, the Division of Health Care Quality, the Determination of Need Program, and the Department's seven public health hospitals made significant strides in carrying out activities to ensure high quality, cost controlled services, such as, the issuing of licenses to the first two birthing centers in the state, and the establishment of a toll-free patient abuse reporting hotline and of an organ transplantation policy.

- **Controlling Communicable Diseases**

To strengthen the Department's programs in the control of communicable diseases, the Divisions of Communicable Diseases and Tuberculosis Control and the State Laboratory Institute were consolidated in the last fiscal year into a new Center for Laboratories and Communicable Disease Control. Among its successful efforts were the coordination of needed counseling and testing services for persons with Acquired Immune Deficiency Syndrome (AIDS), and the assurance of adequate immunization services.

- **Providing Support Services**

The support and coordination of the Department's services are essential to the effective operation of our many programs. To this end, the Department developed specific activities that helped to produce new regulations, analyze the relationship of occupation to cancer and birth outcomes, and implement four, new statewide public education campaigns.

These activities are reflective in small part of the Department's overall programs and services in fiscal year 1985 to reduce the risks of disease and disability in the Commonwealth. None of this could have happened without the Governor's support of public health activities. In addition, the Massachusetts Legislature and the Executive Office of Human Services have been instrumental in furthering our efforts. Our accomplishments also represent the work of many agencies, organizations, groups, and individuals who have helped us to make health care accessible to the people of Massachusetts. To all of you, our sincere thanks.

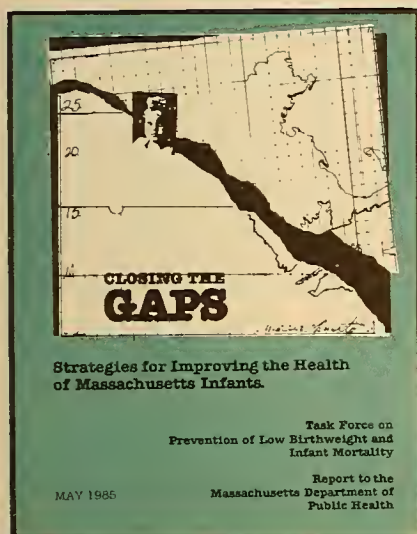


Bailus Walker, Jr., Ph.D., M.P.H.
Commissioner

Fostering a Healthy Society

As we rapidly draw near the 21st Century, the complexities of life demand a comprehensive approach to the provision of health care throughout the Commonwealth. Such an approach requires an integrated effort between all the divisions of the Department, involving combined resources, programs, and personnel.

Highlights



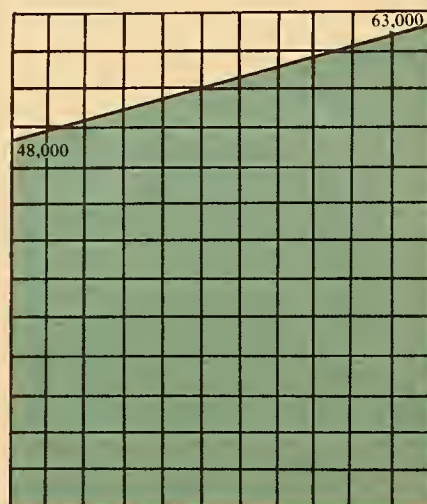
A Task Force on the Prevention of Low Birthweight and Infant Mortality issued a sobering report in May. By the end of the fiscal year, Department staff were beginning to implement the task force's recommendations for "closing the gaps" found in the study.

PREGNANCY & ALCOHOL DON'T MIX!

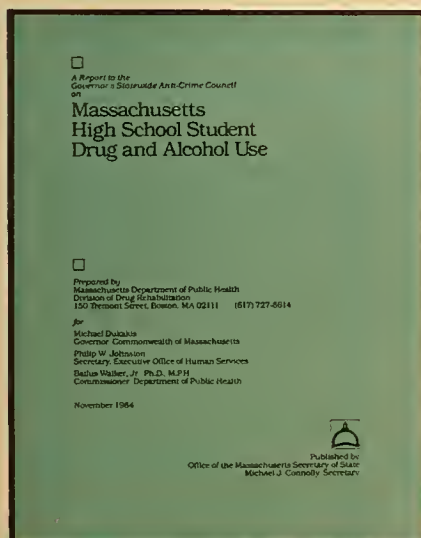
If you are pregnant or are planning to become pregnant, see your physician or visit a prenatal clinic. Also, stop by your nearest Massachusetts CVS/Pharmacy for a free pamphlet presenting scientific facts about drinking alcoholic beverages during your pregnancy and the possible dangers to your unborn child.

Available At Our Prescription Counter

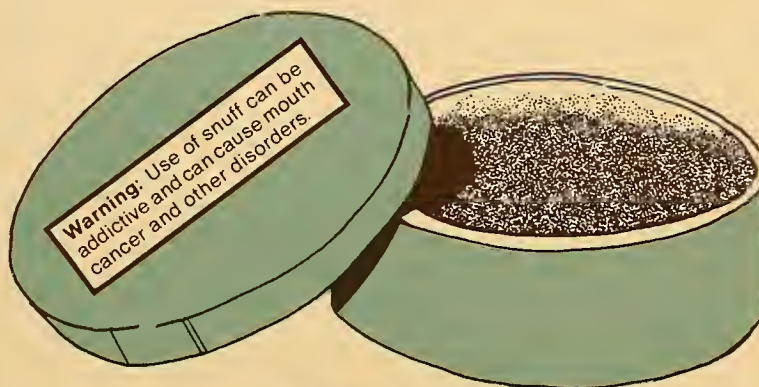
The Division of Alcoholism collaborated with local CVS drug stores in a statewide public awareness campaign on Fetal Alcohol Syndrome, and established two new bilingual, bicultural halfway houses.



Participation in the Women, Infants and Children (WIC) Program rose from 48,000 to 63,000 women, infants, and children.



The Division of Drug Rehabilitation completed a statewide survey on drug and alcohol use among junior and senior high school students in Massachusetts. The results were used by the Governor's Alliance Against Drugs in its efforts.



The Department promulgated a regulation - the first in the nation - requiring a health hazard warning label on containers of snuff sold in the Commonwealth as of February 1, 1986.

Services to Enhance the Health of the Family

An important aspect of the Department's efforts to foster a healthy society in the past year centered on improved services to mothers and children. Through the **Division of Family Health Services**, the Department carried out diverse programs to reduce infant and maternal mortality, promote maternal and child health, evaluate and treat handicapped children, and serve women who are victims of abuse and violence.

- **The Maternal and Infant Care (MIC) Prenatal Projects** reached 4,000 high-risk, low-income pregnant women in 19 high-risk areas of the state with medical care, social services, nutrition counseling, health education, family planning, and other preventive services

- **Under the Federal Special Supplemental Food Program for Women, Infants and Children (WIC)**, the number of women, infants, and children under the age of five who received supplemental nutritious food, nutrition counseling and health care referrals rose from 48,000 to 63,000. In addition, WIC encouraged the development of a **Breastfeeding Promotion Project**, to increase both the number of WIC participants who choose to breastfeed and the duration of breastfeeding. The special **Southeast Asian Refugee Project** served over 2,500 Southeast Asians throughout the state. To aid this group more effectively, WIC trained 12 Southeast Asians to work in 14 local WIC programs, not only as interpreters but also as nutrition assistants.

- **The Children and Youth Projects**, an important element of the Division's efforts to help children become healthy, productive adults, offered primary care to over 45,000 preschool and school age children up to age 21 in low income, high-need areas of the state. Over 200,000 school children were screened by the Division for postural defects, and more than 900 were certified for psychotropic drug use.

- **The High-Risk Infant Identification Program** became fully operational in fiscal year 1985 and identified over 4,000 infants born with low birthweight, congenital anomalies, or other high-risk conditions. Nearly 12,000 high-risk infants and members of their families received community-based support, education, counseling, and referral services.

- **The Sudden Infant Death Syndrome (SIDS)**

Program provided 24-hour, on-call, medical and nursing counseling services statewide to approximately 100 families who had lost a child to this mysterious syndrome. The program also paid for autopsy of the infant, and developed educational and training programs for health professionals.

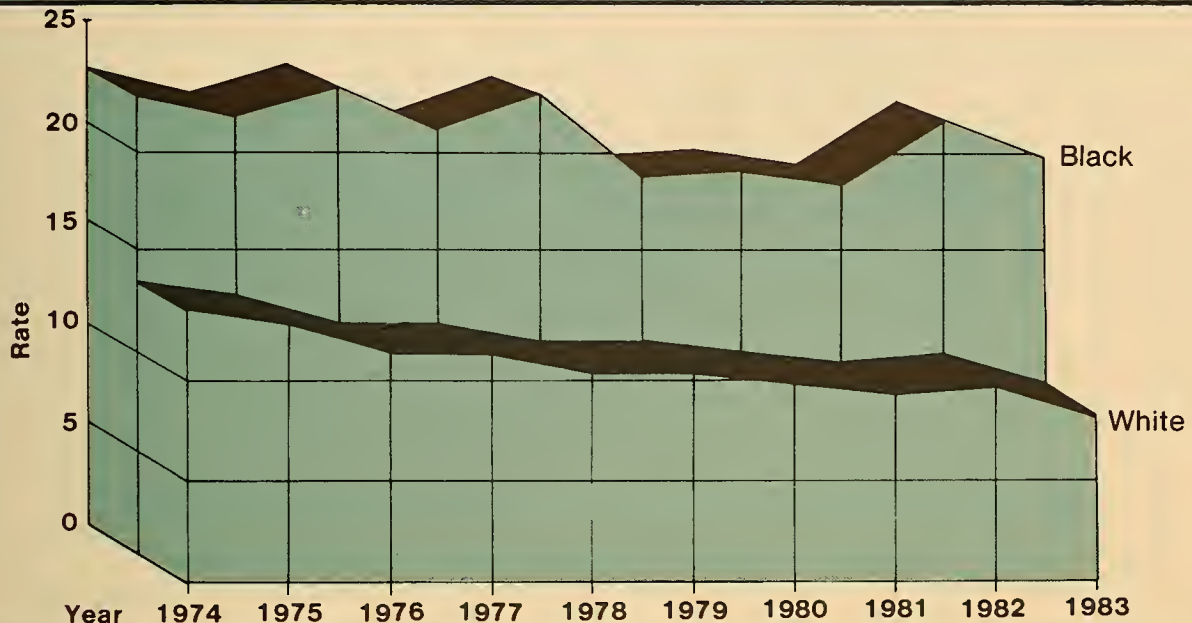
- **All Neonatal Intensive Care Units** in the state received support from the Division of Family Health Services to ensure discharge planning and follow-up with community hospitals and service providers. Over 1,500 infants and their families received community-based support services, primarily through home visits.

- The report of a 19-member **Task Force on the Prevention of Low Birthweight and Infant Mortality**, appointed by Commissioner Walker, revealed gaps not only in rates of low birthweight, newborn and infant deaths by race, ethnicity, and low income level, but also in the percentages of women receiving adequate prenatal and postnatal comprehensive medical care (Fig. 1). By the end of the fiscal year, the task force's recommendations were being readied for implementation:

- All current programs described above to receive additional funds to reach greater numbers of women and children throughout the state.
- The promotion of public/private coalitions at the local and regional levels to discuss the needs and problems of communities at high risk of low birthweight, infant mortality, teen births, and inadequate or lack of prenatal care.
- A media and outreach campaign to educate consumers and providers on the factors promoting healthy birth outcomes, the importance of prenatal care, and ways to obtain care and payment for it.
- A committee of representatives from professional organizations to develop comprehensive prenatal care standards for statewide implementation.
- Healthy Start, subcontracted from the Department of Public Welfare, established as a payer of last resort program for pregnant women who are ineligible for Medicaid, lack health insurance coverage for maternity care, and who have incomes below 185 percent of the federal poverty level. The program will cover prenatal, delivery, and postpartum care.



Figure 1. Infant Mortality Rates by Race, Massachusetts, 1974 - 1983.



IMR=Deaths Under 1 Year/1000 Live Births.

Data Source: Division of Health Statistics and Research, MDPH.

- **The Statewide Childhood Injury Prevention Program (SCIPP)** received a \$750,000 three-year grant from the federal Maternal and Child Health Special Projects of Regional and National Significance to reduce injuries among children and adolescents in the Commonwealth. During fiscal year 1985, SCIPP began to transform its project from a research and demonstration activity into an established statewide program for the reduction of childhood injuries. Two injury prevention modules, on home injury prevention and preschool health, were pilot-tested, and needs assessments were initiated for the primary care and elementary school modules. During the year, SCIPP also worked with the **Massachusetts Poison Control System** and the **Massachusetts Passenger Safety Program** on public education and information efforts.

- **The Pregnancy/Environmental Hotline**, a statewide, toll-free number, gave information to over 1,000 callers on the effects of hazardous substances on the health of pregnant women and their unborn children.

- **The Services to Handicapped Children's (SHC) Section** of the Division of Family Health Services worked to maximize the healthy growth and development of disabled children, and to keep them at home or in the community whenever possible. In all, nearly 10,000 children from birth through age 21 were served through the Division's three units: the Early Childhood Development Services Unit, which supported 43 early intervention providers throughout the state; the Community Services Unit, which served over 500 children in home health care, pediatric nursing homes, and camp programs; and the Clinical Services Unit, a statewide system of specialized clinics for children with handicapping conditions and chronic diseases.

- In the last fiscal year, the **Women's Health Unit** of the Division of Family Health Services expanded to provide numerous and varied services and educational programs designed to reduce morbidity and mortality among women, and to strengthen an understanding of the special health concerns of women within their social, occupational, and reproductive roles. Among these were:

- **The Women's Health and Learning Center**, a comprehensive program for incarcerated women, which increased its services to include 800 women inmates in Massachusetts.



- **An informational and educational program on the health effects of diethylstilbestrol (DES).** More than 100 offspring of women who had been exposed to DES during pregnancy received a diagnostic evaluation at Department-supported medical centers across the state.
- **An Office Technology Education Project,** which developed educational programs for office workers on hazards in the workplace.
- **A Resource Center for the Prevention of Family Violence and Sexual Abuse,** established to consolidate educational materials and collect data on the incidence and ramifications of family violence and sexual abuse in the state.
- **Rape Prevention and Victim Services,** which provided crisis counseling, advocacy, and follow-up for 3,000 victims of rape or sexual abuse in 13 programs across the state.

Services to Help Prepare Adolescents for a Healthy Adulthood

To help prepare adolescents for a healthy, productive adulthood, the Department offers multidisciplinary services across the state. Programs aim to educate adolescents about good health practices, prevent teenage pregnancies, provide better prenatal and follow-up care to teenagers who become pregnant, and prevent alcohol and drug abuse (Table 1).

- **Pregnant and Parenting Adolescent Programs,** which are contracted by the Division of Family Health Services, maintained health care, education, and counseling services for approximately 4,000 teenagers.

- **Six comprehensive health programs** made available medical services, individual and group counseling, education and referral to more than 15,000 adolescents, parents, and community leaders.

Table 1.
Services Delivered by
Adolescent Health Programs, 1985.

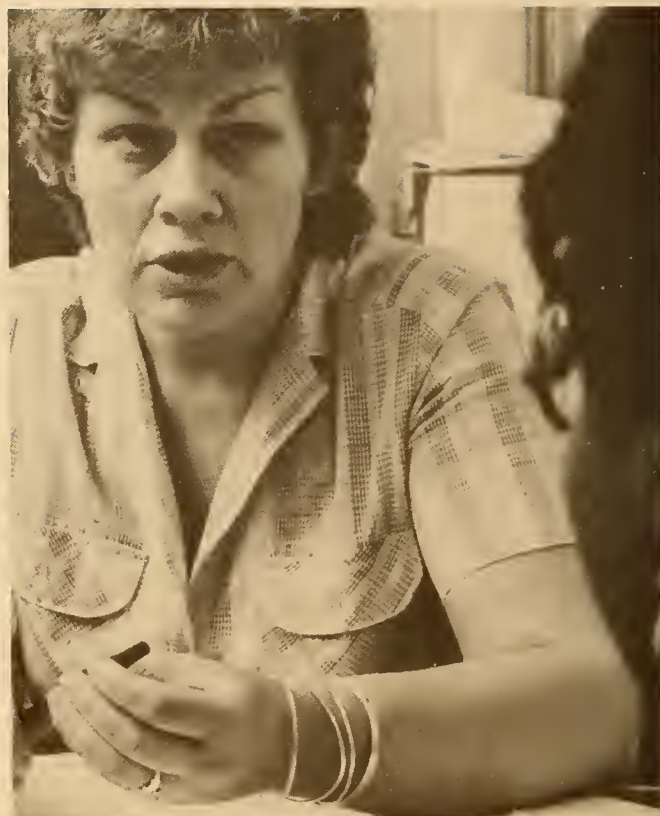
Service	CAHP* (6 programs)	PPP** (9 programs)	Total
1. Clinic visits [†]	28,556	10,908	39,464
2. Medical examinations	12,485	12,439	24,924
3. Counseling sessions	7,767	11,392	19,159
4. Pregnancy tests	2,276	1,871	4,147
5. Family planning visits	8,499	5,146	13,645
6. Home visits	—	11,253	11,253

*CAHP = Comprehensive Adolescent Health Programs.

**PPP = Pregnant and Parenting Programs.

[†]Clinic visits represent single, unduplicated visits.

Source: Division of Family Health Services.



Counseling session, adolescent health programs.

Services to Prevent Addictive Diseases

The Department supports services throughout the state that seek to prevent alcohol and drug abuse and treat drug dependencies when they occur. In fiscal year 1985, the Divisions of Alcoholism and Drug Rehabilitation strengthened existing programs and developed joint projects to deal more effectively with the growing problem of drug abuse and addiction.

- **The Division of Alcoholism** administered a purchase of service system that totaled approximately \$28 million in fiscal year 1985, and developed new and alternative programs during the year. Included were:

- **A public awareness program on Fetal Alcohol Syndrome.** The Division issued an informational brochure, and launched a campaign with Consumer Value Stores (CVS) to distribute the brochure through the 111 CVS pharmacies across the state and make available to the public audio cassette tapes explaining the effects of alcohol consumption during pregnancy.
- In collaboration with the Department of Public Welfare, **a 30-bed Public Inebriate Program Shelter** for men and women in Lawrence.
- **A Short-Term Alcohol and Referral Project** in Boston to help meet the needs of chronic recidivists.
- **Two new bilingual, bicultural halfway houses,** one in Springfield and one in Boston, to meet the needs of the Hispanic community in the state.

- **An innovative Driver Education Program** to serve drivers sentenced for drunk driving by the Quincy City Court.
- **The new 14-day Driving Under the Influence (DUI) Programs**, at the Department's Lakeville and Tewksbury Hospitals and at the Middlesex County Hospital. The addition of 180 beds significantly reduced waiting time for admission.
- **Tertiary Prevention Programs** that included 51 halfway houses, 20 detoxification centers, 46 outpatient programs, and 3 public inebriate programs.

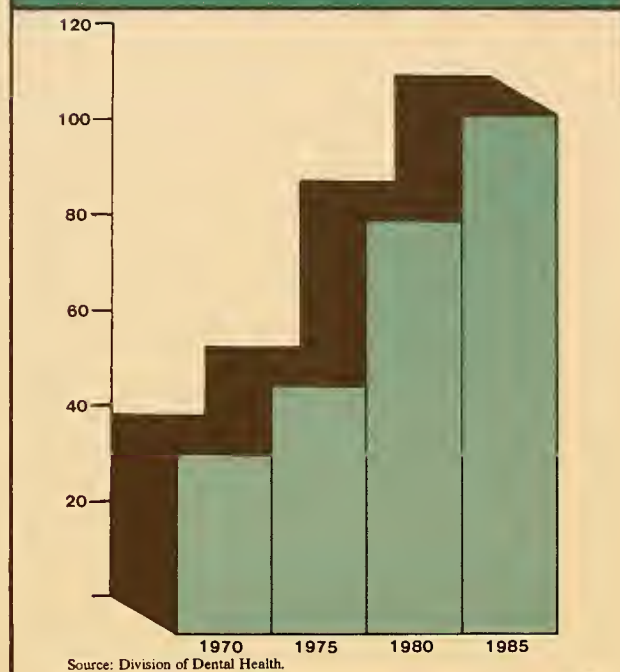
• **The Division of Drug Rehabilitation** continued its work to alleviate drug use and abuse in Massachusetts through a network of prevention and treatment services. In fiscal year 1985, the Division maintained five categories of basic treatment that served 10,917 clients. These included: residential detoxification services, outpatient methadone maintenance, residential drug-free treatment services, and outpatient drug-free counseling services. In addition, the Division's 62 prevention programs designed to help persons at risk offered a wide range of services—prevention education, community prevention programs, and intervention programs.

During the fiscal year, the Division developed several new initiatives:

- **Vocational education, and substance abuse treatment for prison populations**, serving 688 clients.
- **Five new juvenile court diversion programs** to aid young people through short-term counseling sessions, thus preventing habitual drug use.
- **A statewide survey on drug and alcohol use among junior and senior high school students.** The study indicated that drug and alcohol use was widespread in the ninth through twelfth grades. The report aided the Governor's Alliance Against Drugs to mobilize and coordinate the efforts of public and private agencies, and parent and student groups to develop strategies for confronting and reducing drug and alcohol use and abuse by school-aged children.

• The Divisions of Alcoholism and Drug Rehabilitation also cooperated to establish six **residential treatment programs** for youths 14 to 19 years of age who become seriously involved with drugs, and **eight Residential Primary Prevention Centers** across the Commonwealth. Working in collaboration with the Massachusetts Parole Board, the two Divisions initiated a pilot project for inmates being paroled from southeastern Massachusetts correctional institutions. The project seeks to identify alcohol and drug-abusing inmates and refer paroled persons to appropriate alcoholism and drug agencies.

Figure 2. Number of Massachusetts Communities with Fluoridated Water Supplies, 1970 - 1985.



Services to Prevent Dental Disease

To prevent dental disease in the Commonwealth, the Department, through its Division of Dental Health, supports fluoridation of public water supplies, carries out public education on good dental health practices, and provides dental care for wards of the state.

• **Prevention of Oral Disease**—As a result of state and local public education programs, 2.4 million people have been receiving fluoridated water since 1979. By the end of fiscal year 1985, 55 percent of the state's public water supplies were fluoridated, as compared to only 8 percent in 1969 (Fig. 2).

- **Enrollment in the school-based Fluoride Mouthrinse Program** increased by 30 percent to bring the total number of children to 78,000 and the number of participating communities to 150. It is estimated that the program prevents 50,000 teeth from decaying and saves \$900,000 in dental bills.



Participant in sealant program.



Pupil receiving dental sealants.

- An additional \$139,000 was expended during the fiscal year to promote the **use of dental sealants** for prevention of tooth decay among children. Approximately 6,500 children from 23 sites, including local health centers and schools, received the benefits of sealants.
- The Division's **report on the health effects of smokeless tobacco** documented cases of oral cancer, tooth loss, and abrasion. After public hearings in February, the Department promulgated a regulation—first in the nation—requiring a health hazard warning label on containers of snuff sold in the Commonwealth (effective February 1, 1986). The Department also proposed legislation that would place smokeless tobacco products under the state's tobacco tax, and supported raising the legal age for distribution from 16 to 18.
- **Dental Care**—To meet the needs of publicly supported groups outside the main stream of health services, the Division maintained support of seven clinics located at state schools, regional clinics located at sites operated by the state Department of Youth Services, and a clinic for the homeless at the Shattuck Hospital.

Services to Support Public Health Activities in Local Communities

Recognizing the importance of supporting regional and local public health efforts and activities, the Department strengthened its ties with community providers, local boards of health, and other agencies and organizations. To this end, new and ongoing initiatives included:

- **The Office of Emergency Medical Services (OEMS)**, which is responsible for ensuring prompt and effective delivery of emergency medical care, continued its efforts to prevent cardiac disease, traumatic injury, and other medical emergencies. Programs to upgrade resources and to broaden local and state networks of emergency medical services functioned throughout the year. These included:
 - Administrative coordination and approval of all basic **emergency medical technician (EMT)** courses in the state. In fiscal year 1985, there were approximately 8,000 EMTs in the Commonwealth.
 - **Advanced Life Support Services** providing sophisticated treatment to victims at the scene of



Youngster receiving hearing test from Western Massachusetts Hospital audiologist.

accident or illness to 27 percent of the state's population.

- **A comprehensive program on pediatric emergencies**, which trained more than 140 emergency departments, and a Critical Care Emergency Departments' Nurse Education Program, which trained 115 nurses, bringing the total number of such nurses to more than 700.
- As part of the Department's overall effort to make medical care available and accessible to all sections of the population, the Department again supported 37 **community health centers**. These centers, which in the past fiscal year had more than 165,000 visits statewide, offered dental, obstetrical, gynecological, pediatric, adolescent, primary care and social services.
- **The Office of Local Health Services and Regional Operations**, which was established to help strengthen ties with regional and local health providers, became fully operational in fiscal year 1985. Through its four Regional Health Offices, a variety of programs were developed or coordinated for local boards of health and other health agencies. Major activities included training, information, advocacy, policy development and assessment, consultation and communications. In addition, the four

offices served as the regional base for a number of the Department's centrally administered programs, such as, services to handicapped children, lead poisoning prevention, dental health, and enforcement of food and drug laws.


Among the highlights of the activities of the Regional Health Offices during the fiscal year were:

- Participation in the formation of a Worcester Housing Court and development of a course in Community Health Nursing at Worcester State College (**Central Regional Health Office**).
- Review of the health service needs in Lawrence and participation in housing enforcement activities in Lowell (**Northeastern Regional Health Office**).
- Participation in the Southeastern Massachusetts Cervical Cancer Workgroup, to provide information and health education on cervical cancer, and serving on the Mayor of Brockton's Task Force on Health and Human Services (**Southeastern Regional Health Office**).
- Assisting in the formation of the Eastern Franklin County Health District and participation in several interagency efforts to meet local human services needs (**Western Regional Health Office**).

Protecting the Individual

Protecting the health of the approximately 6,000,000 citizens of the Commonwealth remains the major focus of the Department of Public Health's activities. How this can best be achieved has received serious consideration from all divisions, units, and programs. Changing people's lifestyles to reduce the incidence of heart disease, cancer, and stroke is but one aspect of a multifaceted approach to the problem, and basic to all prevention efforts. The Department's responses to the concerns of the people include efforts to reduce the risk of physical, chemical, and biological agents in the environment, and are carried out by the Center for Health Promotion and Environmental Disease Prevention, and the Bureau of Environmental Health Services.

Highlights



RIGHT to KNOW
WORKPLACE NOTICE

THE RIGHT TO KNOW LAW Chapter 151B of the Massachusetts General Laws provides new rights to employees and community residents regarding the dissemination of information on toxic and hazardous substances.

These rights include:

WORKPLACE NOTICE A notice must be posted in a central location in the workplace informing employees of their rights under the law. The notice must be in the English language. It must also be available to non-English speaking persons in their language.

TRAINING Employers must provide an annual training program to employees who work with toxic or hazardous substances. New employees must receive training within thirty days from date of hire. The training program must be conducted by a competent person and may be in the form of verbal and/or written instruction. As a minimum, training must include an explanation of employee rights, the MSDS as a document, and those MSDS covering toxic or hazardous substances used, handled or stored in the workplace applicable to the employee's position, including and labeling of substances that are carcinogenic, teratogenic, or otherwise hazardous. The employer must keep a record of this training or instruction which must be given with pay during the employee's normal work or shift hours.

MATERIAL SAFETY DATA SHEET (MSDS) The Material Safety Data Sheet is the document that provides information on each toxic or hazardous substance used or stored in the workplace. An employee or his or her designated representative has the right to obtain and examine the MSDS for any toxic or hazardous substance in which the employee "is," "may be" or "has been" exposed. If the employee requests a copy, it must be made to the employee in writing after four working days from the date the request is made to the employer to refuse to work with the substance when two conditions exist:

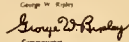
1. The employee fails to furnish the employer with an MSDS; and 2. the employer fails to furnish the employee with proof that the employee has received danger orders to obtain an MSDS either from the manufacturer or through the Commissioner of Labor and Industries.

Public employees classified as performing an essential service may not refuse to work with the substance.

LABELING All containers in the workplace of more than five pounds or more than one gallon containing toxic or hazardous substances must be labeled with the chemical name of the substance. Containers of substances must be labeled with the chemical name of each toxic or hazardous component when the component comprises ten percent or more of the mixture. Containers of more than 50 pounds or more than 5 gallons must also be labeled with the appropriate National Fire Protection Association (NFPA) Symbol. Labels must be clear, prominent, in English and written in English.

NONDISCRIMINATION An employee who believes he or she has been discharged, disciplined or discriminated against by an employer for exercising rights granted under the Law has one hundred eighty days to file a complaint with the Commissioner of the Department of Labor and Industries. A copy of the written complaint must be sent to the employee at the same time by certified mail.

NOTE: The employee's rights listed above are further defined under Chapter 151B of the Massachusetts General Laws and the Code of Massachusetts Regulations 401 CMR 21.00. For additional information call the nearest office of the Department of Labor and Industries. Boston (617) 725-5816, Fax: (617) 725-7462, North Andover (978) 682-8575, Worcester (508) 753-8368, Springfield (413) 74-1411. Printed: 10/87 647-4214

George W. Ryles

Commissioner
Department of Labor and Industries

The Department began to meet its responsibilities under the provisions of the Massachusetts Right-to-Know Law.



Twelve community programs provided comprehensive high blood pressure detection and follow-up care to approximately 13,500 residents of the Commonwealth, an increase of 35 percent over the previous year.



The Department issued the state's first regulations that permit physician assistants and nurse practitioners to prescribe medicines for chronically ill patients.



Lead Poisoning Prevention Week, which was held in June by proclamation of Governor Dukakis, began a year-long campaign to inform the public of the serious health effects of lead poisoning.

Services to Promote Health and Prevent Disease

In fiscal year 1985, the Center for Health Promotion and Environmental Disease Prevention began implementation of a comprehensive program to reduce the lifestyle risk factors for heart disease, cancer, and stroke. At the same time, the Center responded to community concerns about elevated cancer rates and possible links between these rates and environmental toxic exposures. These activities were carried out through two Divisions: Health Promotion Sciences and Environmental Epidemiology and Toxicology.

- **The Division of Health Promotion Sciences** provided high blood pressure screening programs, coordinated physical fitness programs, sponsored smoking prevention activities, and operated a nutritional hotline and information service:

- **Twelve community programs provided comprehensive high blood pressure detection and follow-up care** to approximately 13,500 residents of the Commonwealth, an increase of 35 percent over the previous year. The screening programs also supplied participants with educational materials on the other major lifestyle risk factors for heart disease, cancer, and stroke — smoking, physical inactivity, and poor nutritional habits. The Hypertension Training and Education Center,

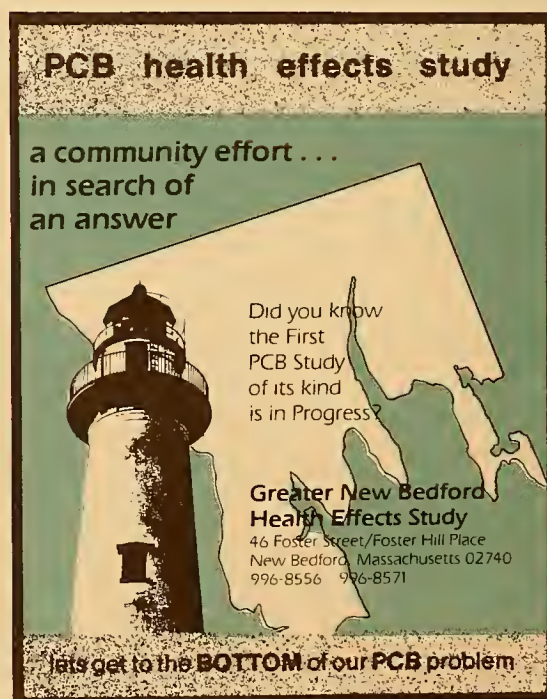
funded by the Center, offered professional education to approximately 600 health care professionals through five regional conferences held in May.

- **The LifeStyle Program**, a worksite health promotion service, expanded to include state employees in 20 agencies in downtown Boston. During the year, the LifeStyle staff administered 181 health assessments to establish a baseline for future activities. Other programs included educational presentations, counseling, and exercise classes.
- **The Resource Center for Firefighter Fitness** at Bridgewater and Amherst, which served firefighters and other public safety employees from 15 communities, again received support from the Center. The programs demonstrated that incorporating a fitness program into one's lifestyle can increase the efficiency of cardiovascular fitness.
- In cooperation with the Governor's Committee on Physical Fitness and Sports, the Center sponsored the first annual **"Fitness Day on the Hill."** Legislators and their aides who participated in the free fitness testing received a thorough health screening, including cardiovascular risk factor analysis and aerobic fitness, body composition, flexibility and muscular endurance tests. Participants received a summary and interpretation of their test results, as well as recommendations for improved fitness.



Governor Dukakis participating in Fitness Day on the Hill.

- Responding to the problem of increasing incidence of lung cancer in Massachusetts, the Department intensified its **educational activities on the dangers of smoking**. During January 1985, which had been designated "Nonsmokers Awareness Month" by the Governor, the Department carried on a joint campaign with the Massachusetts Hospital Association to educate nonsmokers about the health effects of exposure to tobacco smoke and how to protect themselves from second-hand smoke. The Department distributed 50,000 copies of a brochure entitled, "Are You *Really* a Nonsmoker?", which provided information on the effects of tobacco smoke on nonsmokers and practical advice on what they can do to protect themselves from second-hand smoke.
- The Center collaborated with the American Lung Association of Massachusetts in the publication of a new edition of the **Nonsmokers' Guide to Massachusetts**. The 1985 Guide included an updated listing of health facilities, insurance companies, and restaurants that have voluntarily instituted policies to promote the health and well-being of nonsmokers.
- Four state colleges, with resources provided by the Department, offered **graduate level courses** to approximately 100 teachers and allied school personnel on the **prevention of smoking and drug abuse**. The Department of Education's Commonwealth Inservice Institute received support to establish 11 inservice training programs for approximately 220 teachers and allied school personnel. In addition, the Department of Public Health supported the training of 25 health educators in Boston's middle schools.
- Many epidemiologic and intervention studies in this country and abroad have stressed the relationship of diet to such diseases as coronary heart disease and cancer. Responding to a heightened consumer awareness and concern, the **Massachusetts Nutrition Resource Center (MNRC)** continued to offer consumers and health professionals expert nutrition advice and information through a statewide, toll-free, nutrition hotline and mail request service. MNRC staff answered over 10,000 requests for information on sodium in the diet, fiber, calcium needs of adults, fat and cholesterol. The Massachusetts Nutrition Resource Center is a joint program of the Department and the Frances Stern Nutrition Center of Tufts University.
- **The Division of Environmental Epidemiology and Toxicology** provided services designed to identify the determinants of disease in order to prevent or reduce the future incidence of such diseases as leukemia, cancer of the kidney, pancreatic cancer and birth defects. Services included a number of studies to help identify communities for which disease prevention resources can be targeted, as well as technical assistance to agencies and groups:
 - The Division began a study of elevated rates for **kidney cancer in the Merrimack Valley** to determine whether the many years of manufacturing in the area may have increased the population's risk of kidney cancer. Other investigations carried out in 20 communities in the state found no elevation of cancer rates.
 - **The Greater New Bedford Polychlorinated Biphenyls (PCB) study** began full field operations in May 1985 to determine the exposure of 1,400 adults in the Greater New Bedford area to PCBs and possible health effects.
 - Collaborating with the Boston Department of Health and Hospitals, staff conducted an **analysis of the causes of death in 15 neighborhoods in Boston** from 1979-1982, concentrating on the three leading causes of death. Planning for risk factor reduction programs in neighborhoods identified as high risk was underway by the end of the fiscal year.
 - Responding to the growing number of citizen inquiries about pollutants in the environment and food chain, the Division carried out **assessments of the health risks to the public from exposure to toxic substances** in the air and in water, food, and consumer products. Staff provided technical assistance to state agencies and committees established to assess the effects of environmental pollutants on the health of the people. Division staff also provided **guidance on the health risks of pesticides** being considered for registration by the Massachusetts Pesticide Board Subcommittee. After intensive review of the literature by unit staff, the subcommittee banned the use of chlordane, a pesticide used for termite control, and amitrole, a herbicide.
 - In response to a **continuing elevation of childhood leukemia cases in Woburn**, the Center convened a two-day meeting of scientific experts from around the country to review all existing health and environmental data from Woburn, and the possible relation of the cases to the dumping of toxic waste. By the end of the fiscal year, staff were preparing recommendations for follow-up activities.





Food and Drug Inspector checking freshness of milk.

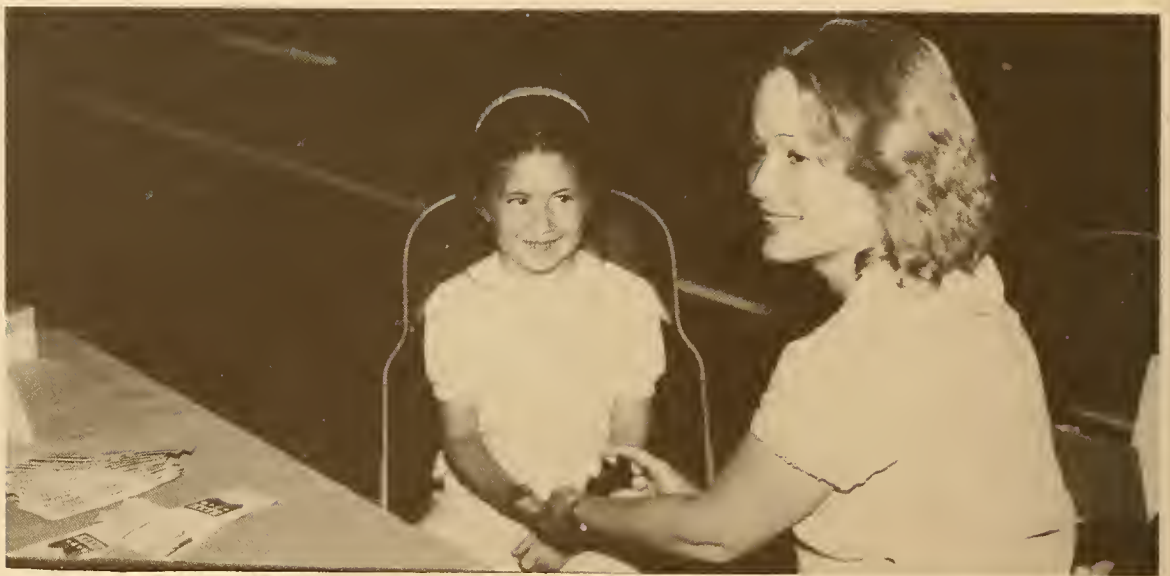
Services to Ensure a Healthy Environment

In fiscal year 1985, the **Bureau of Environmental Health Services**, which includes four divisions, continued its work of identifying and evaluating environmental hazards to human health and developing corrective measures to reduce such risks.

- The **Division of Food and Drugs** again functioned as the principal consumer-protection agency of state government in the areas of the safety of food, drugs, and other consumer products. During fiscal year 1985, the Division maintained several projects to ensure a safe and wholesome food supply for Massachusetts consumers:

- **Shellfish sampling and enforcement actions** were conducted in cooperation with the Division of Law Enforcement of the state Department of Fisheries, Wildlife, and Recreational Vehicles to prevent diseases related to contaminated shellfish.
- To prevent illness due to contaminated milk, a **comprehensive inspection and sampling program** in the milk industry was strictly enforced
- **Food salvage and reconditioning operations** for food and consumer products were closely watched by the Division to determine the suitability of these products for use by consumers.
- The drug control unit investigated **reports of drug losses or tamperings** in nursing homes and hospitals, and brought formal charges against 19 persons for drug diversions. Such activities helped reduce costs of care and prevented the drugs from entering the illicit market.

- To determine compliance with state **standards for ethylene dibromide (EDB)**, a cancer-causing agent, inspectors from the Division continued to monitor food products. Where levels exceeded the established standards, inspectors removed the products from the state's food supply.
- The Division developed several new initiatives to promote the health of the consumer and to reduce health care costs in the Commonwealth:
 - In April 1985, the Department issued the first regulations that permit **physician assistants and nurse practitioners to prescribe medicines for chronically ill patients**. Through the new registration program, the Department has created a pool of qualified, specially trained health professionals to provide care for a number of groups who had been underserved in the past — patients in nursing homes, patients in state institutions, people in homeless shelters, and the chronically ill who are cared for at home but who may have to be placed in health facilities if adequate home care is not available.
 - In a complementary move, the Department had earlier expanded the **state's generic drug list**, the Massachusetts List of Interchangeable Drugs, to include an additional 52 brand-name prescription drug products, and 126 new product strengths and dosage forms. These additions brought the number of interchangeable drug products in the state to more than 9,300, thus greatly reducing the cost of health care to consumers. It was estimated that the Massachusetts Medicaid Program would realize a savings of over \$2.5 million through the use of generic drugs in calendar year 1984. The list was mailed to approximately 30,000 pharmacists and physicians registered in Massachusetts.
 - New regulations requiring the **licensure of all institutions that use dogs or cats for research or teaching** were developed with the assistance of an advisory committee, and promulgated by the Public Health Council. The regulations ensure that dogs and cats used for research and teaching are handled and treated humanely. The Massachusetts Society for the Prevention of Cruelty to Animals and the Animal Rescue League of Boston were named by the Commissioner as official designees of the Department of Public Health to inspect institutions licensed under the new law.
 - Responding to public concern over residual levels of polychlorinated biphenyls (PCBs) in the food supply, the Division, in conjunction with the Center for Health Promotion and Environmental Disease Prevention, prepared an issue paper and proposed a **PCB tolerance level of 2ppm**, a level consistent with that of the FDA. The lowered tolerance level will aid consumers in determining what foods to purchase and what foods (especially certain species of fish) to avoid.



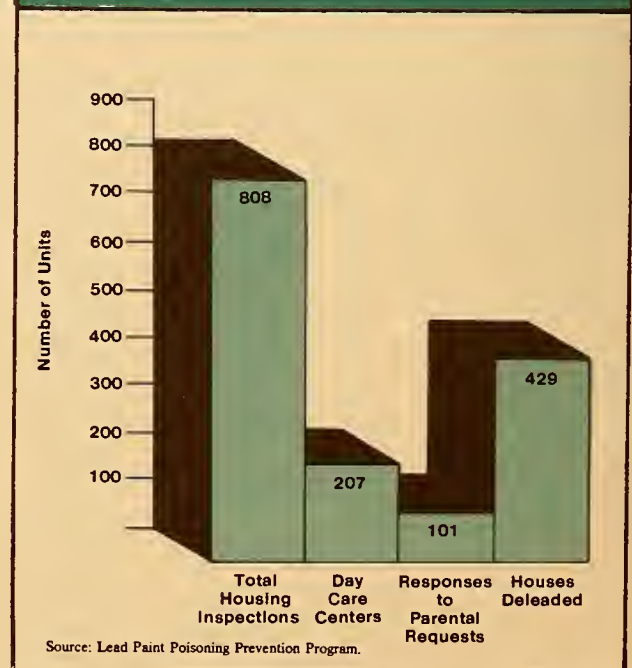
Nurse from Childhood Lead Poisoning Prevention Program screening for blood lead levels.

- **The Childhood Lead Poisoning Prevention Program (CLPPP)** continued its work to reduce the exposure of children under the age of six years to the hazards of lead poisoning. The Division provided screening for children who are at risk, distributed screening samples to health care providers, identified and worked to eliminate lead hazards in the environment, and conducted educational programs for both the medical and lay community on the health hazards of lead. During fiscal year 1985:

- **Approximately 142,000 children**, 38 percent of all children between the ages of six months and five years, **were screened for lead poisoning**, and **1,531 children**, or **1 percent**, **were identified as lead poisoned**. Laboratory staff analyzed 13,350 blood specimens, a 10 percent increase over the previous year, and 3,100 nonblood specimens for lead content. All lead poisoned children received coordinated medical and environmental follow-up.
- Division environmental inspectors made approximately **810 initial housing inspections** during fiscal year 1985 (Fig. 3), to reduce risk of housing-related illness and injury. The Division also organized three conferences for lead inspectors and deleaders, and extended training and technical assistance to local boards of health and to workers in the private sector.
- An important new program was begun in January 1985, when the Division began to offer **crisis intervention deleading services** through contracts with qualified deleaders throughout the state. The program seeks to provide safe, rapid, and thorough deleading services to eligible property owners and landlords in cases involving a seriously poisoned child in an effort to prevent further exposure.
- **Lead Poisoning Prevention Week**, which was held in June by proclamation of the Governor, opened a year-long campaign to inform the public of the serious health effects of lead poisoning. New educational materials that highlighted the role of dust and soil as important sources of lead were developed and widely distributed.

- The Division supervised the activities of **nine lead poisoning prevention projects** funded through the Maternal and Child Health Services Block Grant. Projects in Boston, Lawrence, Worcester, and New Bedford offered screening, case management, inspection and enforcement services. Projects in Salem and Springfield provided screening and case management, and two projects conducted screening in Holyoke and in high-risk cities in central Massachusetts. More than 16,000 children in high-risk areas, the largest annual total to date, were screened directly by project personnel.

Figure 3. Housing Inspections Carried Out by Lead Poisoning Prevention Program, Fiscal Year 1985.



- **The Division of Community Sanitation** assumed responsibility for three new programs in fiscal year 1985: Environmental Hygiene, the Right-to-Know Program, and the Urea Formaldehyde Foam Insulation (UFFI) Repurchase Program:

- Staff of the Environmental Hygiene Program worked with housing officials in the City of Lowell on **compliance with sections of the State Sanitary Code that relate to housing**. Similar training programs were held in Fall River, New Bedford, Salem, Haverhill and Boston.
- During the year, staff of the Environmental Hygiene Program also maintained its **inspection of various facilities throughout the state** (Table 2). Visits resulted in the improvement of environmental sanitary conditions in recreational and farm labor camps. Inspection of housing units resulted in the correction of a large number of violations, thereby reducing the potential for disease and injury to the occupants. Conditions in correctional facilities have improved considerably since the initiation of a routine, comprehensive inspection program by the Department. Cooperating with the Division of Dental Health's Fluoridation Program, staff sanitarians performed quarterly inspections of fluoridation equipment in communities with fluoridated public water supplies.
- Under the provisions of the **Massachusetts Right-to-Know Law**, the Department has begun to meet its responsibilities including: establishment and annual amendment of the Massachusetts Substance List (MSL), a compilation of 1,600 substances which may be dangerous to workers' health or safety if improperly stored, used or handled; review and

final determination of trade secret and research laboratory exemption applications (during the fiscal year, the Department received 47 trade secret exemption applications, representing 524 substances, and 175 applications from 301 research laboratories); ensuring the release of trade secret information on a confidential basis to medical and physician-supervised nonmedical personnel; and dissemination of information on the health effects of toxic or hazardous substances to the public and private sectors. Training seminars were held for staff in the Boston and regional health offices, and 21 such seminars were conducted for industrial and commercial groups throughout the state.

- To reduce family exposure to the concentrations of formaldehyde present in homes where **urea formaldehyde foam** had been used as an insulating material, the Department promulgated new **repurchase regulations**. Under these regulations, any person in whose home UFFI was installed can request the installer, distributor or manufacturer to pay for the removal of the foam. During the fiscal year, 1,582 requests were received. Although no levels of safety had been established, the presence of any formaldehyde was deemed to produce unnecessary health risks.

- **The Radiation Control Program** maintained its responsibility of protecting the public from both ionizing and nonionizing sources of radiation. To reduce the incidence of disease caused by ionizing radiation, the program:

- Carried out **1,400 surveys of diagnostic x-ray units** in hospitals, private medical and dental offices, as well as inspections of nuclear medicine departments and users of radiosopes. A special survey was conducted to study radiation safety efforts at hospitals and clinics relating to patient exposure during routine chest x-rays. To protect the consumer from other sources of man-made radiation and emissions from electronic products, program personnel also surveyed color TV receivers, video display terminals, devices that use lasers, sun tanning lamps, and various consumer products containing radioactive materials.
- Continued **environmental surveillance and inspection of fixed nuclear power stations**, two in Massachusetts and one in Vermont on the Massachusetts border. Personnel visited the sites every week to ensure the proper operation of the monitoring equipment. Staff participated in full-scale emergency response exercises at the three nuclear facilities, and conducted a series of training programs for emergency workers in the 10-mile emergency planning zone around the Pilgrim, Rowe, Vernon and Seabrook nuclear power plants to ensure the capability of the workers to protect the health and safety of the residents in an emergency.
- Participated in the **U.S. Department of Energy's Crystalline Repository Project**. Participants have been examining 236 crystalline rock formations in the 17 states granted study awards to identify potentially acceptable sites for the burial of high-level radiation waste.

Table 2.
Summary of Activities
Environmental Hygiene
July 1, 1984 - June 30, 1985.

Facilities	Activities
Housing	433 Initial inspections
	59 Reinspections
	12 Assumptions of jurisdiction
Correctional Facilities	24 State facility inspections
	25 County facility inspections
	33 DYS facility inspections*
Lock-ups	178 Inspections
Recreational Camps	42 Inspections
Fluoridation Sites	292 visits
Farm Labor Camps	62 camp certifications (573 workers)

*DYS = Division of Youth Services.

Enhancing Patient Services and Health Care Cost Containment

The Department carries out its mandate — “To maintain, protect and improve the health and well-being of the people” — not only through its programs of direct services, but through programs of standard setting for food, water, air, and health care quality. In addition, the Department fulfills its mandate through monitoring, surveillance, licensure and review, and through controlling health care costs wherever possible. The Department’s seven hospitals also provide a broad range of preventive, curative, and rehabilitative services to ensure all residents of the Commonwealth high quality, affordable care.

Highlights



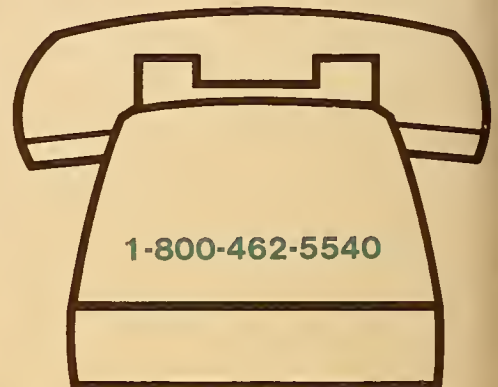
The Division of Health Care Quality issued licenses to the first two birthing centers in the state under newly promulgated regulations.



The Department established an organ transplantation policy that sought to ensure that organ transplants are introduced into the state in a controlled, phased manner.

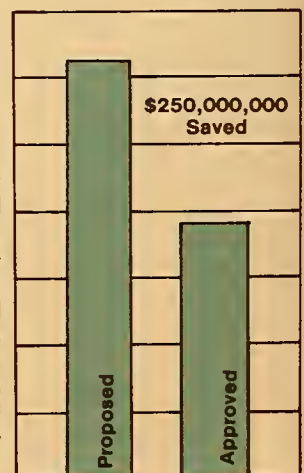


The Department’s seven public health hospitals developed a number of new services and programs, among them a Short-Term Alcohol Rehabilitation and Treatment Program at Lakeville Hospital, a Respite Care Program at Rutland Heights Hospital, a Driving Under the Influence Unit at Tewksbury Hospital, and a palliative care unit for AIDS patients at Western Massachusetts Hospital.



The Division of Health Care Quality also intensified its public information campaign on patient abuse and established a toll-free reporting hotline, resulting in about a 15 percent increase in the number of complaints of abuse, mistreatment or neglect over the previous year.

The Department’s Determination of Need Program (DoN) saved the Commonwealth more than \$250 million in health care costs in fiscal year 1985 through its review of DoN applications. DoN staff also reduced the backlog of pending applications by 59 percent.



Services to Ensure Quality Health Care

In fiscal year 1985, the **Division of Health Care Quality**, which is responsible for setting the criteria in a health care system that includes more than 1,500 health facilities (hospitals, nursing homes, rest homes, clinical laboratories, blood banks, home health agencies, hospices, state schools, and community-based intermediate care facilities for the retarded), continued to ensure high quality, preventative, curative, and rehabilitative health care to residents of the Commonwealth. In addition, the Division certified that 930 facilities or services were meeting state and federal standards required for participation in the Medicaid and Medicare Programs. The Division's activities included:

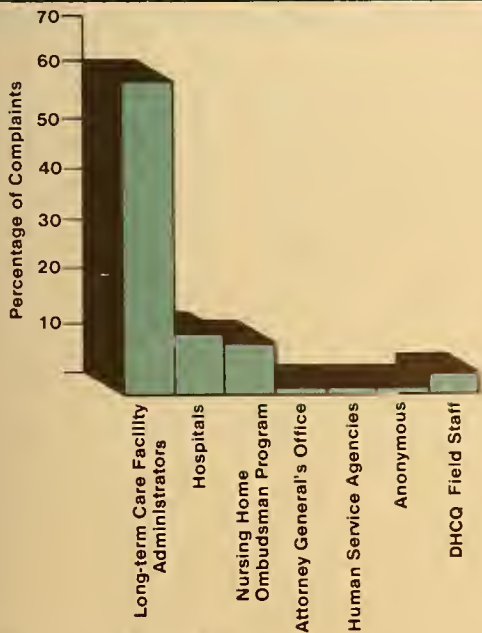
- **Through its program of licensure and certification, safeguarding patients from:** patient abuse, mistreatment, and neglect, misuse of patient's personnel funds, poor sanitary conditions, inaccurate laboratory results, inappropriate use of body restraints, misuse of drugs, too few or inadequately trained staff, inaccurate medical records, improper disposal of infectious hazardous waste, ambulances without proper or working equipment, and fire safety hazards.

- **Investigating and, where appropriate, taking action on approximately 210 complaints of abuse, mistreatment or neglect of patients at the facilities it licenses (Fig. 4).** This is an increase of about 15 percent over the previous year, the result of a stepped up campaign of public information and the establishment of a toll-free patient abuse hot line. Approximately 50 percent of all complaints of patient abuse were found to be justified. To protect the health and safety of patients, Division staff worked to ensure that the facility took necessary action to prevent further instances of patient harm.

Initiating action to revoke the licenses of 11 substandard operators of long-term care facilities and to decertify 17 substandard nursing homes from the Medicaid Program. Staff also recommended Medicare decertification of two hospitals, one nursing home and one End Stage Renal Dialysis service. During the first six months of 1985, the Division investigated 256 complaints, a dramatic 60 percent increase over the same period in 1983. During the year, the Division appointed a two-member complaint investigation team to provide timely investigations of all complaints. As a result, the "turnaround" time for completion of a report on each complaint has been reduced to 25 days as compared to the six-to-seven week average in 1983.

Carrying out research studies, evaluations of innovative projects, and development of new or revised regulations to identify and respond to changes in the health care delivery system. These included: completion of a survey of approximately 1,200 rest home residents in 55 facilities to determine the relevance of current licensing standards to meet the needs of these residents; issuance of licenses to the first two birthing centers in the state under newly promulgated regulations; issuance of licenses to 36 clinical laboratories in physicians' offices under new laboratory licensing regulations that ensure the accuracy of data used by physicians for diagnosis and for monitoring treatment regimens; convening a Hospice Advisory Committee to assist in the development of hospice licensing regulations; and studying hemodialysis equipment and services provided by hospitals and free standing centers throughout the Commonwealth to identify and select areas that may require regulatory action to prevent malfunctioning of equipment of consequent danger to dialysis patients.

Figure 4. Source of Patient Abuse Complaints Received by Division of Health Care Quality, Fiscal Year 1985.



Source: Division of Health Care Quality.

Services to Provide Extensive Hospital Care

The Department of Public Health has seven hospitals equipped for a broad range of clinical services intended especially to meet the needs of long-term disabilities. To respond to the increasing demand for health services to an expanding population, these hospitals have assumed a more direct role in serving the regions in which they are located. They now provide preventive, therapeutic, and rehabilitative services that are often difficult to obtain through the private sector. The seven hospitals admitted 5,709 patients during the fiscal year. The average length of stay varied from 20.8 days at the main unit of the Lemuel Shattuck Hospital to 1,962 at the Cushing Hospital (Table 3). During the fiscal year, the hospitals developed a number of new services and programs to complement existing activities:

- **Cushing Hospital**, a chronic disease hospital for the elderly, became part of the Department of Public Health early in the fiscal year. In addition to providing a variety of clinics and a day care center for the elderly, the hospital conducted health fairs, wellness workshops, "healthy days", and related programs to provide a broad spectrum of health promotion services and information for older citizens.

- **Lakeville Hospital**, responding to the state's need for additional Driving Under the Influence (DUI) Programs for second offenders, implemented its Short-Term Alcohol Rehabilitation and Treatment (START) Program. Within three months, a separate building was renovated, staff hired and trained, and a 60-bed unit opened. The hospital recorded a higher patient census than in the previous fiscal year as a result of a concerted effort to admit active rehabilitation patients, thus allowing a higher turnover. Approximately three-quarters of the patients were discharged to their homes. The hospital also provided care to patients who require the support of a ventilator for long periods of time.

- **Lemuel Shattuck Hospital** continued to provide inpatient care to patients suffering acute episodes of chronic illness and outpatient follow-up. Clients of the Departments of Correction and Mental Health received medical and surgical services. Occupancy remained high — 92 percent. Services to the homeless were supported during the year and shelter guests were helped to make the transition from homelessness to employment and housing. The hospital also continued to operate its unique chronic pain facility and sleep research study.

- **The Massachusetts Hospital School** has, since the turn of the century, provided comprehensive health and educational services to the physically handicapped, intellectually able children of the Commonwealth. To encourage the growth of the handicapped child into a well-adjusted adult, the hospital maintains its independent residential living program. In addition, the young people have actively participated in wheelchair competitions at the state, regional, and national levels. In the Junior Wheelchair Olympics, one patient at the school broke several national records and was deemed a world-class athlete. The facility also helped more students than in previous years to find internship programs at computer and high tech industries, thus setting the basis

for possible future employment. The number of affiliations of medical schools and colleges with the Hospital School for specialized training continued to grow. Students came from as far away as Michigan.

- **The Rutland Heights Hospital**, long noted for its expertise in the treatment of alcoholism, enlarged the bed capacity of its 14-Day Residential Alcoholism Program for persons charged with a second drunk driving offense from 131 to 150 to meet the large number of referrals. During the fiscal year, 3,287 clients were admitted. The four-bed Respite Care Program, designed to meet the needs of families caring for the sick and disabled at home, became fully operational and admitted 70 patients during the year. By the end of the fiscal year, Rutland Heights Hospital had finalized plans for a new 20-bed inpatient unit for the treatment of adolescents with drug and alcohol problems. The unit will be the only one of its kind in central Massachusetts.

- **Tewksbury Hospital** opened its Driving Under the Influence Unit for second offenders in May 1985. Since then, it has been operating at 90 percent of capacity, and 167 clients have completed the 14-day treatment program. In addition to its programs for second offender drunk drivers and the homeless, Tewksbury Hospital, the oldest chronic disease hospital in the state, cooperated with a diverse group of community organizations such as the Clinical Pastoral Education Program, the Day Care Center for children of working mothers with low incomes, Head Start, and the Independent Living Program.

- **The Western Massachusetts Hospital**, which operates inpatient and outpatient programs for both adults and children, maintained two of its programs for the seriously ill: a palliative care unit for the terminally ill, and its nationally recognized coma unit. During the year, the hospital opened a much needed palliative care unit for AIDS patients. The hospital also operates Kamp for Kids, a day camp for both able and multi-handicapped children, and constructed a challenge course for the camp to assist participants develop not only motor skills but also confidence in themselves.



Summer Olympics at Tewksbury Hospital.



Cushing Hospital patient receiving physical therapy.

Table 3.
Public Health Hospitals
Annual Census Summary — July 1, 1984 - July 30, 1985.

Hospitals	Admissions	Discharges	Days	Stay*	Census	Visits
Cushing Hospital	67	6	124,591	1,962.0	368.0	—
Lakeville	361	342	33,592	90.8	75.7	11,796
Lemuel Shattuck						
Main	1,644	1,530	45,268	20.8	129.9	18,710
Medical Geriatric	55	53	10,830	938.0	38.8	35
Bay Cove (Mental Health patients)	526	524	23,301	36.8	66.3	483
Mass. Hospital School	131	115	26,917	313.5	102.0**	1,609
Rutland Heights Hospital						
Chronic	418	398	33,045	86.7	95.9	—
DUI†	1,694	1,753	22,459	—	126.0	—
Tewksbury						
Main	242	73	263,261	1,388.0	721.0	—
Nichols (Homeless men)	290	288	51,172	152.5	148.0	—
Western Mass. Hospital	281	127	28,898	86.4	72.6	8,630
TOTAL	5,709	5,209	663,334	—	—	41,263

*Stay represents number of days.

**Average daily census at the Massachusetts Hospital School has been adjusted to reflect enrollment days.

†Driving Under the Influence Program.

Source: Office of Local Health Services and Regional Operations.



Challenge course at the Western Massachusetts Hospital Kamp for Kids.

Services to Meet Organ Transplant Needs

In the absence of a national policy, the Department has become increasingly involved in the past two years in the development of a state policy on organ transplantation. In December 1984, the Department announced the adoption of a policy based on the work of two state task forces appointed to examine specific issues related to liver transplantation and the general issues of organ transplantation. Major points of the policy sought to ensure that organ transplants are introduced into the state in a controlled, phased manner, and that criteria for patient selection for the procedures are public, fair, and equitable, and designed to offer transplantation to patients who can benefit the most from it, regardless of ability to pay or insurance status. During the fiscal year, staff of the organ donation, procurement, and transplantation program made substantial progress in several areas:

- Staff reviewed and recommended **approval of the application of the Boston Center for Heart Transplantation** for the implementation of heart transplantation in the state. In approving the application, the Department authorized a three-year trial period for the service. Conditions for the approval required the Center to guarantee access to the procedure and a limit on the drain on other resources.
- The Department authorized several **exemptions from the Determination of Need (DoN) process for research programs in pancreas transplantation**. The procedure, still considered experimental, has not yet been covered by public and private reimbursement. Patients receiving pancreas transplants during the one-year period will be covered by research money rather than by patient care funds.
- **The Organ Transplant Fund**, authorized by Chapter 693 of the Acts of 1983, became operational in fiscal year 1985. Through their income tax returns, more than 37,000 residents of the state contributed \$184,000 to the fund, which was established to pay for all or a part of the costs of organ transplantation for Massachusetts residents. The fund will be used to assist patients in paying for immunosuppressive drugs and other out-of-pocket expenses associated with their transplants.

Services to Control Health Care Costs

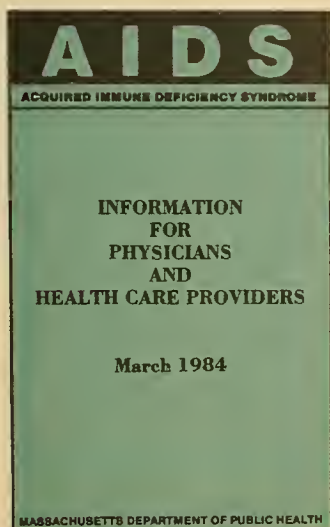
The primary goal of the Department's **Determination of Need (DoN) Program** continued to be to ensure the people of the Commonwealth appropriate access to good quality health care at the lowest reasonable cost. Through the DoN program, the Department worked to prevent unnecessary building of new facilities or expansion of existing facilities to avoid wasteful duplication of services and facilities. Such duplication contributes to spiraling health costs and reduces the quality of services. During the fiscal year, DoN staff:

- **Completed reviews of 179 proposals**. Of the \$634,072,140 in capital costs reviewed, \$377,906,955 (59 percent) were approved; \$256,165,145 of the costs, which would have entered the health care system, were found to be unnecessary. Applications ranged from several large projects to numerous smaller projects eligible for "delegated review." The "delegated review" process expedited smaller projects with limited effect upon cost or health service organization by allowing the Commissioner to approve applications for such projects without review by the Public Health Council.
- **Achieved its goal of substantially reducing the backlog of pending projects**. Pending applications have been reduced from 325 to 212, a reduction of 59 percent. Fewer than 90 applications have been pending for longer than 10 months. Expeditious review of projects has helped to keep projects at their original estimated costs.
- **Generally revitalized the program**, which was able to respond more quickly and effectively to the demands of the health care system.

Controlling Communicable Diseases

The Department carries out health surveillance and disease control activities to protect the health of the people of the Commonwealth through testing, vaccination, treatment, analysis of disease trends, and the assessment of threats to the population. To strengthen the Department's programs in the control of communicable diseases, the Divisions of Communicable Diseases and Tuberculosis Control and the State Laboratory Institute were consolidated in the last fiscal year into a new Center for Laboratories and Communicable Disease Control, located in the Theobald Smith Health Facility in Jamaica Plain.

Highlights



Statewide efforts provided needed counseling and testing services for persons with Acquired Immune Deficiency Syndrome (AIDS).



Analyses of toxic chemicals such as polychlorinated biphenyls (PCBs) received considerable attention in fiscal year 1985.



Capability for analyses of illicit drugs was virtually doubled with the implementation of a supplementary budget for forensic drug laboratory work.



Diphtheria, tetanus, and pertussis (DPT) immunization continued uninterrupted in the state. In addition, the Massachusetts Legislature enacted a bill filed by the Department to require up-to-date immunization status of all entering college and postgraduate students.

Services to Prevent Disease

During fiscal year 1985, the **Center for Laboratories and Communicable Disease Control** concentrated its efforts on emerging health problems while maintaining the quality of its on-going services (Table 4):

- **Statewide efforts provided needed counseling and testing services for persons with Acquired Immune Deficiency Syndrome (AIDS).** The number of cases continued to increase among high-risk groups at a significant doubling rate (Fig. 5). The Department provided state support to the Governor's Task Force on AIDS which, in conjunction with the Massachusetts AIDS Research Council, channeled state funds to medical researchers and health care providers for projects to advance knowledge, improve the treatment, or identify potential therapeutic agents for AIDS. As a result of the work of the task force and the Department, AIDS was made a reportable disease. By the end of the fiscal year, steps had been taken to create an office within the Department to help manage the state's AIDS activities and to hire a state AIDS Coordinator.

Table 4.
Center for Laboratories and
Communicable Disease Control
Laboratory Services
July 1, 1984 - June 30, 1985.

Program (unit of measure)	Number
Biologics (immunizing doses produced)	
Serums	121,934
Vaccines	922,480
Total number of human doses	1,044,414
Newborn Screening (children tested)	
Massachusetts	82,115
Other New England states	87,884
Total number of children screened	169,999
Microbiology (samples tested)	
Bacteriology	120,529
Mycobacteriology	29,932
Virology and rabies	13,892
Serology	113,713
Clinical investigations	5,525
Total number of samples	283,591
Food and Environmental (samples tested)	
Food safety	10,994
Environmental/human exposure	2,070
Total samples tested	13,064
Drug Analysis (samples tested)	
Cocaine	8,245
Heroin	7,603
Marijuana	46,164
Other controlled substances	10,991
Total samples tested	73,003

- **Tuberculosis was identified as a serious problem among the state's homeless population.** The development of laboratory and epidemiologic data enabled state and city health agencies to mount a strong case-finding effort, identifying tuberculosis among the homeless, and referring affected individuals for appropriate treatment. Follow-up indicated the effectiveness of therapy and also revealed the difficulty and cost of reaching at-risk populations out of the mainstream of society.

- **Refugee health problems received special attention** through the use of federal grants and intensive community work with field coordinators. The Department has been working to develop new means of delivering health services to newer immigrant groups, such as Cambodians and Thais, to prevent serious illness, high infant death rates, and impairment of future health.

- **Diphtheria, tetanus, and pertussis (DTP) immunization continued uninterrupted in the state.** Massachusetts was unique among the states in its ability to provide adequate supplies of DTP vaccine for children. In addition, Massachusetts was able to meet emergency requests for DTP vaccine, manufactured at the state Biologic Laboratories, for school immunization clinics in neighboring states that were unable to obtain sufficient supplies from commercial sources.

- **Major measles outbreaks occurred in Massachusetts colleges** as well as throughout college campuses in the country. Communicable Disease Control staff worked closely with college health services and local health departments to control these outbreaks. Approximately 30,000 doses of vaccine were distributed to 56 colleges; special vaccination clinics were established, and quarantine advisories issued when necessary. The



Laboratory staff conducting HTLV III antibody test for AIDS.

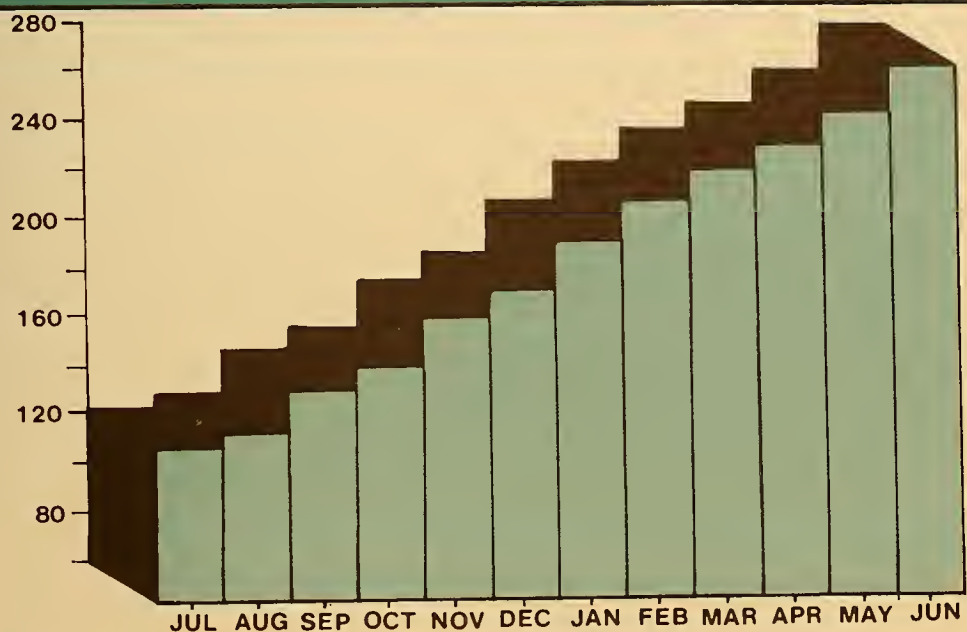
Massachusetts Legislature enacted a bill filed by the Department to require up-to-date immunization status of all entering college and postgraduate students. It is expected that implementation of the law will help prevent future outbreaks.

- **Lyme Disease, a tick-borne infection, was recognized more frequently on the North Shore.** This is a major new site outside the endemic focus on Cape Cod and the Islands. Communicable Disease Control staff provided increased laboratory testing services, as well as consultation and information on prevention to physicians in the affected areas. By adding Lyme Disease to the Department's list of reportable diseases, identification of "hot spots" for investigation by state epidemiologists will be facilitated.
- **Outbreaks of foodborne diseases were investigated** in restaurants, hospitals, nursing homes, schools and large group picnics. Salmonella, campylobacter, shigella and Norwalk virus were the major groups of organisms confirmed by the laboratory. Findings from epidemiologic and laboratory investigations provided a sound basis for public health intervention.
- **Venereal disease control programs underwent a major review** to determine the effectiveness of service delivery to critical areas. Planned changes, including the requiring of treatment protocols, cost control for the Department of Public Health, and introduction of testing services for chlamydia, will now be implemented.

Services to Ensure Healthy Infants

- The basic screening services that identify treatable disorders operated effectively during the year, and all newborn infants in Massachusetts were tested.
- **New program initiatives were added** to the programs to prevent hypothyroidism, phenylketonuria (PKU), homocystinuria and other amino acid disorders.
 - **A follow-up laboratory study was performed** to determine the feasibility of using the newborn blood sample already submitted for screening to test for the infectious disease toxoplasmosis, which can cause blindness or mental retardation in children who may have a silent infection at birth. A pilot toxoplasmosis screening program to determine the prevalence of infection in newborn infants and to assess the utility of a regular screening program received new state funding support.
 - **Collaborative work with Boston City Hospital** to assess the effects of drug abuse in pregnancy got underway under a grant from the National Institute on Drug Abuse. Laboratory analyses were being done to determine accurately drug abuse in pregnant women as an aid to clinical studies in assessing the relation of drug abuse to birth defects. These studies can lead to improvement in prevention, care, and control of risks to the normal development of the fetus and a healthy newborn.

Figure 5. AIDS Surveillance Cumulative Cases in Massachusetts, Fiscal Year 1985.*



* Includes 56 Non-Massachusetts Cases.
Source: Center for Laboratories and Communicable Disease Control.



Taking newborn blood sample to test for PKU and other metabolic disorders.

Services to Meet Vaccine and Serum Needs

Despite the on-going work of a difficult renovation of the Biologic Laboratory facility, the production and distribution of vaccines and serums proceeded on schedule and met the needs of the Commonwealth. Newer specialty products, i.e., Varicella Zoster and CMV Immune Globulins, were produced and used in disease treatment and prevention for seriously ill patients.

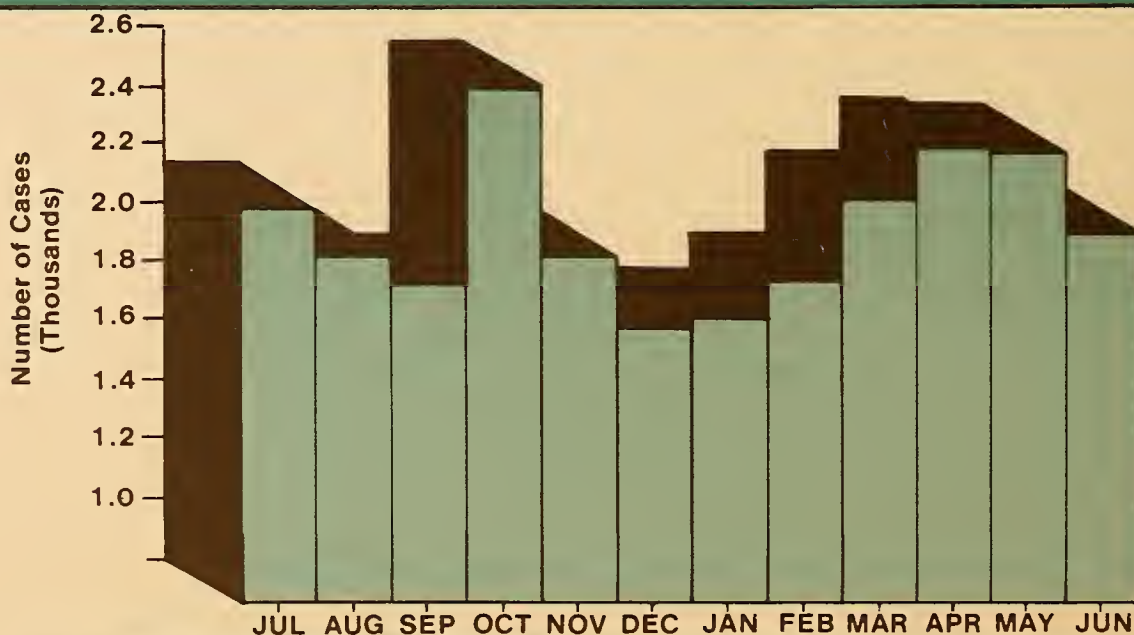
Services to Analyze Toxic Exposures

Programs to meet the rapidly growing demands for measuring or estimating human exposure to toxic chemicals were maintained and new ones developed. Analyses of toxic chemicals received considerable attention in fiscal year 1985. Included were levels of polychlorinated biphenyls (PCBs) in serum specimens from participants in the Greater New Bedford Health Effects Study and from specimens taken from lobster and fish, and residues of pesticides in food, with specific emphasis on monitoring of ethylene dibromide (EDB). Food sampled in Massachusetts after the introduction of regulations no longer had high levels of EDB.

Services to Analyze Illicit Drugs

An initiative to increase analytical services to law enforcement agencies was implemented with the passage of a supplementary budget for forensic drug laboratory work. Capability for analyses was virtually doubled to meet the demands of expanded law enforcement efforts to control drug abuse and trafficking. Drug samples were submitted to the laboratories in record numbers during the year, with cocaine emerging as a major contributor to the drug trafficking problem in Massachusetts (Fig. 6).

Figure 6. Drug Cases Received for Analysis, Fiscal Year 1985.

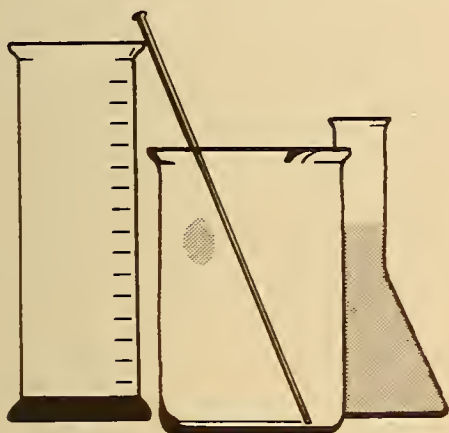


Source: Center for Laboratories and Communicable Disease Control.

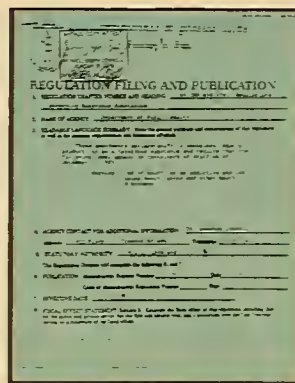
Providing Support Services

To assist the program units and divisions in carrying out their assigned responsibilities, the Department of Public Health staffs other divisions and offices whose main tasks are support and coordination of services.

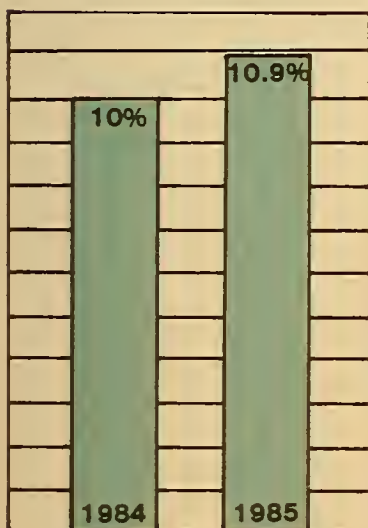
Highlights



The Research and Epidemiology Unit of the Division of Health Statistics and Research cooperated with the National Institute for Safety and Health (NIOSH) to study the relationship of occupation to cancer and birth outcomes.



The Office of General Counsel helped to develop more than 20 sets of new regulations.



The work of the Division of Human Resources and the Affirmative Action Office resulted in an overall increase of minority employees in the agency from 10 to 10.9 percent.



The Office of Public Information and Health Education issued 70 press releases, arranged seven news conferences, responded to nearly 2,000 inquiries, and helped plan four statewide public education campaigns during the last fiscal year.

Services for Coordinated Health Data and Statistics

Statistics compiled by the **Division of Health Statistics and Research** have become increasingly important as a guide to the Department in setting priorities, formulating and implementing health policy decisions, and evaluating program results. The officially designated Massachusetts Center for Health Statistics, the Division provides coordination of health data among agencies that collect and use such data, and statistical standards and technical assistance to users of health and demographic data. Among the Division's major activities in fiscal year 1985 were:

- The preparation of completely revised 1982 and 1983 editions of the **Annual Report of Vital Statistics**.
- Preparation of the **Massachusetts Cancer Registry's 1983 Report of Cancer Incidence in Massachusetts**. The increasing number of cases of lung cancer throughout the state, especially in women, was one of the important findings (Fig. 7). Cancer Registry data served as an important resource for other divisions of the Department, principally the Center for Health Promotion and Environmental Disease Prevention.
- Initiation by the **Research and Epidemiology Unit** of a cooperative agreement with the National Institute of Safety and Health (NIOSH) to develop an analytical surveillance system of the relation of occupation to cancer and birth outcomes.
- Initiation of a case-control study, funded by the federal Environmental Protection Agency, to determine the effects on cancer mortality of **chlorine and chloramine in drinking water in 54 towns**.
- Preparation of the **Massachusetts Chart Book**, a comparison of patterns of mortality in Massachusetts at the beginning and end of the past decade, as well as comparison of Massachusetts mortality data with those of the United States.

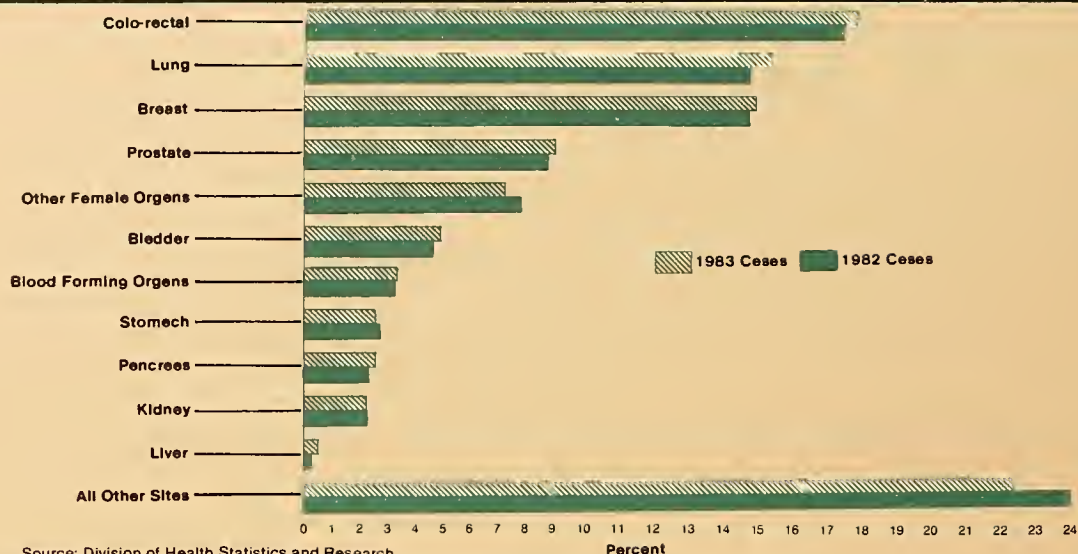
Services to Develop Long-Range Planning

The **Office of Policy and Planning** coordinated all legislative activities for the Department, proposed policy recommendations on agency priorities and programs, and acted as a liaison with constituent groups of health providers and consumers in the state. During fiscal year 1985, the Office coordinated testimony and tracked the progress of 15 bills filed by the Department and of 400 health-related bills supported by the Department.

Services to Provide Legal Support

The **Office of the General Counsel** served as the legal liaison between the Department and the public. It provided the legal knowledge and support required by other divisions in promulgating regulations to protect the health and safety of the people of the Commonwealth. New regulations on ambulance licensure, food establishments, abuse and neglect of nursing home patients, the care of laboratory animals used for research, and the prescribing of medications by nurse practitioners and physician assistants were among the more than 20 sets which Office staff helped to develop.

Figure 7. Massachusetts Cancer Incidence by Site, 1982, 1983.



Services to Centralize Administrative Support

Within the **Bureau of Management Services** are located the Divisions of Data Processing, Budget, and Human Resources, the Offices of Employee Relations, Affirmative Action, and Central Services, and the Central Library. Among the accomplishments in fiscal year 1985 of these units, which provide central administrative support services to the Department, were:

- **The assurance of equal opportunity to all employees of the Department.** The Division of Human Resources and the Affirmative Action Office assisted various divisions in the employment of an additional 110 minority persons during the fiscal year, raising the total number in the Department to 534, an overall increase from 10 percent to 10.9 percent. In addition, an agreement was completed and signed with the U.S. Office for Civil Rights ensuring that the Department is in compliance with federal laws and regulations in its practices for hiring, providing proper working conditions, and promoting personnel who are handicapped. The Department also implemented the Governor's Minority Business Enterprise Program in which funds were specified for goods and services to be provided by minority owned or managed businesses, and a telephone device for the deaf was installed to allow the hearing impaired to communicate directly with the Department.
- **The participation of the Department in the Commonwealth of Massachusetts Paper Recycling Program,** organized through Central Services. In addition to saving a valuable resource, the program offers regular employment to persons with developmental disabilities.
- **The subsidizing of the libraries at the Rutland Heights Hospital and the Massachusetts Hospital School to do computerized literature searches on the National Library of Medicine's data bases,** thus bringing the number of the Department's libraries providing such searches to five. In addition, in the Department's Central Library, the use of computer

search services more than doubled during the year. At the same time, the requests for material, articles, and books increased to nearly 3,000. The Central Library is now able to send requests for material to over 4,900 public, academic, corporate, and governmental libraries by using the nationwide computer system.

Services to Disseminate Information

The Office of Public Information and Health Education continued its activities designed to keep the public up-to-date about health issues. In fiscal year 1985, the Office:

- Issued 70 press releases.
- Arranged seven news conferences.
- Responded to nearly 2,000 inquiries from the press, the public, and legislators.
- Assisted in the coordination of four statewide public education campaigns.
- Developed public service announcements, brochures, pamphlets, and fact sheets that, among other topics, alerted the public to the dangers of fetal alcohol syndrome, the effects of the threat of nuclear war on children, and the facts about DES.
- Issued a major publication, "Ten Initiatives to Improve Public Health in Massachusetts," which was distributed state and nationwide.
- Organized a series of Public Health Rounds programs that included, among others, a three-session "Access to Health Care: Who's Losing Out and Why?", a session on children growing up in the nuclear age, and a session on lead in gasoline.

By the end of the fiscal year, the Office was collaborating with other divisions within the Department on plans for educational campaigns in fiscal year 1986 on the early warning signs of heart attack, the common risk factors for the three leading causes of death (heart attack, cancer, and stroke), and the prevention of infant mortality.

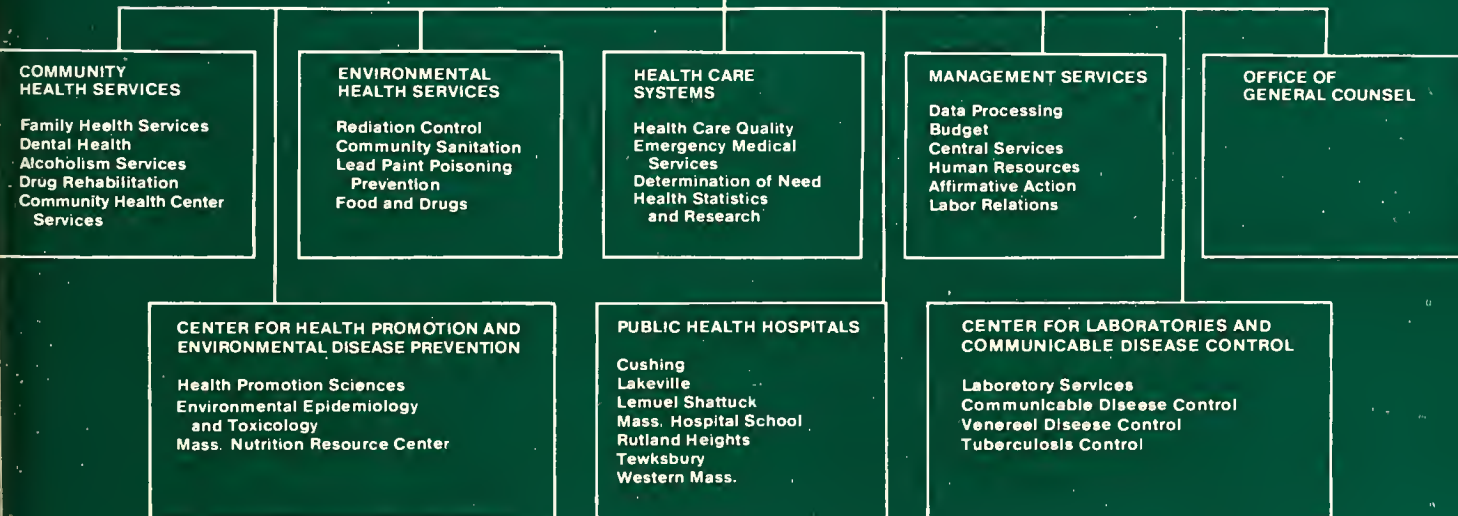


Children in Family Health Services slide tape show "Every Family A Healthy Family".

Department of Public Health Expenditure Report
July 1, 1984 - June 30, 1985.

	STATE	FEDERAL	TOTAL
COMMISSIONER'S OFFICE	994,767	—	994,767
MANAGEMENT SERVICES	3,170,581	—	3,170,581
GENERAL COUNSEL	204,383	—	204,383
Sub-Total	<u>4,369,731</u>	<u>—</u>	<u>4,369,731</u>
CENTER FOR HEALTH PROMOTION & ENVIRONMENTAL DISEASE PREVENTION			
Environmental Epidemiology & Toxicology	250,525	11,747	262,272
Health Promotion Sciences	747,391	703,284	1,450,675
Sub-Total	<u>997,916</u>	<u>715,031</u>	<u>1,712,947</u>
OFFICE OF LOCAL & REGIONAL HEALTH SERVICES	715,218	75,000	790,218
COMMUNITY HEALTH SERVICES			
Family Health Services	21,139,303	34,350,300	55,489,603
Dental Health	2,449,585	251,000	2,700,585
Community Health Centers	1,159,184	—	1,159,184
Alcoholism	23,631,641	4,420,600	28,052,241
Drug Rehabilitation	6,656,486	3,880,672	10,537,158
Sub-Total	<u>55,036,199</u>	<u>42,902,572</u>	<u>97,938,771</u>
ENVIRONMENTAL HEALTH SERVICES			
Lead Poisoning Prevention	912,127	650,000	1,562,127
Radiation Control	284,965	18,631	303,596
Food and Drugs	1,317,962	—	1,317,962
Community Sanitation	28,240	216,481	244,721
Right-to-Know	80,987	—	80,987
Sub-Total	<u>2,624,281</u>	<u>885,112</u>	<u>3,509,393</u>
HEALTH CARE SYSTEMS			
Health Statistics and Research	1,433,263	204,200	1,637,463
Determination of Need	489,514	—	489,514
Emergency Medical Services	438,689	1,012,018	1,450,707
Health Care Quality	3,707,498	864,218	4,571,716
Sub-Total	<u>6,068,964</u>	<u>2,080,436</u>	<u>8,149,400</u>
CENTER FOR LABORATORIES & COMMUNICABLE DISEASE CONTROL			
State Laboratory Institute	5,702,997	—	5,702,997
Communicable and Venereal Diseases	5,300,070	184,703	5,484,773
Tuberculosis Control	2,625,279	207,792	2,833,071
Sub-Total	<u>13,628,346</u>	<u>392,495</u>	<u>14,020,841</u>
HOSPITALS			
Cushing Hospital	12,722,845	—	12,722,845
Lakeville Hospital	8,261,153	—	8,261,153
Lemuel Shattuck Hospital	21,146,039	—	21,146,039
Massachusetts Hospital School	7,629,928	—	7,629,928
Rutland Heights Hospital	7,440,592	—	7,440,592
Tewksbury Hospital	20,592,801	—	20,592,801
Western Massachusetts Hospital	6,048,815	—	6,049,815
Sub-Total	<u>83,842,173</u>	<u>—</u>	<u>83,842,173</u>
TOTAL	\$167,282,828	\$47,050,646	\$214,333,474

**EXECUTIVE OFFICE OF HUMAN SERVICES
MASSACHUSETTS DEPARTMENT OF PUBLIC HEALTH
June 30, 1985**



**The Commonwealth of Massachusetts
Michael S. Dukakis, Governor**

**Executive Office of Human Services
Philip W. Johnston, Secretary**

**Department of Public Health
Bailus Walker, Jr., Ph.D., M.P.H., Commissioner**

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Daniel D. Carter, State Purchasing Agent

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